
		NTSB ID: ANC03LA029		Aircraft Registration Number: N205BA	
		Occurrence Date: 03/02/2003		Most Critical Injury: Minor	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place KOTZEBUE		State AK	Zip Code 99752	Local Time 1504	Time Zone AST
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility: 1		Direction From Airport: 260	
Aircraft Information Summary					
Aircraft Manufacturer Cessna		Model/Series 208		Type of Aircraft Airplane	
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
<p>Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:</p> <p>On March 2, 2003, about 1504 Alaska standard time, a Cessna 208 airplane, N205BA, sustained substantial damage when it collided with ice and snow-covered terrain during the final approach phase of a visual flight rules (VFR) landing, about 1 mile from the approach end of runway 08 at the Ralph Wien Memorial Airport, Kotzebue, Alaska. The airplane was being operated by Bering Air, Nome, Alaska, as a VFR cross-country positioning flight under Title 14, CFR Part 91, when the accident occurred. The airline transport certificated pilot, the sole occupant, received minor injuries. Instrument meteorological conditions prevailed at the airport, and the airplane was operating under a special VFR clearance. The flight originated at the Shungnak Airport, Shungnak, Alaska, at 1358, and a VFR flight plan was filed.</p> <p>The director of operations for the operator reported the airplane was returning to Kotzebue from Shungnak without passengers at the conclusion of an on-demand air taxi flight. Shungnak is located about 128 miles east of Kotzebue.</p> <p>During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC) on March 3, 2003, the pilot reported that when he departed from Shungnak, the visibility at Kotzebue was greater than 6 miles. As he neared Kotzebue, the visibility had decreased and several airplanes in the area were requesting special VFR clearances into the Class E surface area. He requested a special VFR clearance but had to hold outside the area for other VFR and IFR traffic. Once he was cleared to enter the surface area, the pilot said he established a GPS waypoint 4 miles from the runway and descended to 1,000 feet. He continued inbound and descended to 300 feet. At 1 mile from the airport, the pilot said he looked up from the instrument panel but could not see the airport. He also stated that he was in a whiteout condition. The airplane collided with the snow-covered sea ice, short of the runway threshold.</p> <p>A review of a transcript of the air/ground radio communications tapes maintained by the Federal Aviation Administration (FAA) at the Kotzebue Flight Service Station (FSS) facility revealed that about 1120, the pilot obtained area weather information and filed a VFR flight plan for a 4.5 hour flight departing from Kotzebue, stopping at several remote villages and returning. The pilot inquired from the FSS specialist about anticipated weather conditions by stating, in part: "...what time do they figure that low weather is suppose to hit us?" The specialist replied: "...in the terminal [forecast] it says one o'clock, but I think it's going to be later than that. Deering, [Alaska, about 50 miles south of Kotzebue] and Buckland, [Alaska, about 65 miles southeast of Kotzebue] have some lower ceilings, but their winds aren't really that strong yet, so might be a little holding off a little longer than what they had." The pilot replied, in part: "Okay, we'll kind of keep track of it..."</p> <p>The FSS specialist informed the pilot that: "Caravan 5BA roger, and due to the airmets, I do have to tell you VFR flight [is] not recommended." The specialist then provided a pilot weather report from the area of Ambler, Alaska, that indicated the ceiling was 3,000 feet overcast, the visibility</p>					
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	Occurrence Type: Accident

# Narrative (Continued)

was unrestricted, the wind at 1,500 feet was 090 degrees at 30 knots, but calm at the surface. Ambler is located 112 miles east-northeast of Kotzebue. The FSS specialist then provided a Kotzebue airport advisory that included an altimeter setting of 29.54 inHg. The pilot acknowledged the weather information and departed from Kotzebue about 1123.

At 1441, the pilot contacted the Kotzebue FSS via radio and stated, in part: "and Kotzebue, Caravan 205BA, I got your weather and stuff, and I'll hold outside your Class Echo surface area until arrival of the IFR inbound, and then I'd like to get a special, maintaining separation with the outbound Charlie Foxtrot." The pilot then indicated he was holding 10 miles to the northeast. At 1445, the pilot told the FSS specialist he was holding at Pipe Spit (located about 7.5 miles northeast of the Kotzebue airport).

At 1449, the pilot contacted the Kotzebue FSS and stated, in part: "...5 Bravo Alphas losing visibility over there at Pipe Spit, I'm going over to the mouth of the Noatak [river] area." The mouth of the Noatak is about 7.5 miles north of the Kotzebue airport. At 1452, the pilot provided a pilot report of the weather conditions to the FSS specialist by stating: "Yeah, it's pretty grim out to the east right now (unintelligible) northwest towards Noatak, Kivalina is still real good, but I'm getting where I can't see Lockhart Point from the mouth of the Noatak." Lockhart Point is about 5 miles north of the Kotzebue airport.

At 1453, an Aviation Routine Weather Report (METAR) at Kotzebue was reporting, in part: Wind, 080 degrees (true) at 26 knots; visibility, 1 statute mile, runway 08 visibility variable from 5,500 to greater than 6,000 feet in light snow and blowing snow; clouds and sky condition, few at 1,300 feet, 2,000 feet broken, 2,700 feet overcast; temperature, 30 degrees F; dew point, 29 degrees F; altimeter, 29.51 inHg; remarks, peak wind 080 degrees at 33 knots at 1427, snow began at 1434.

At 1458, the Kotzebue FSS specialist issued a clearance to the pilot by stating, in part: " ATC clears Caravan 205BA to enter the Kotzebue surface area. Maintain special VFR conditions at or below 1,500 feet.... Report landing complete...Airport advisory, wind 080 [degrees] at 25 [knots], gusting to 33 [knots], favoring runway 08; altimeter 29.51." The pilot acknowledged the clearance.

At 1501, a special aviation weather observation stated, in part: Wind, 080 degrees (true) at 26 knots; visibility, 3/4 statute mile, runway 08 visibility variable from 3,500 to greater than 6,000 feet in light snow and blowing snow; clouds and sky condition, 1,100 feet broken, 2,000 feet overcast; temperature, 30 degrees F; dew point, 29 degrees F; altimeter, 29.50 inHg.

At 1504, FSS personnel picked up an emergency locator transmitter (ELT) signal and attempted to contact the pilot. The pilot acknowledged that he had crashed. FSS personnel notified search and rescue personnel and kept in radio contact with the pilot. At 1514, the pilot commented: "...I'm alright, bumped my head and bleeding a little bit, but other than that I must not a had the altimeter set quite right. I still got it showing couple hundred feet here so I must a misheard you or mis misaligned it or something."

A transcript of the air to ground communications between the airplane and the Kotzebue FSS facility is included in the public docket of this accident.

At 1507, a special weather observation stated, in part: Wind, 080 degrees (true) at 27 knots; visibility, 1/2 statute mile, runway 08 visibility variable from 2,800 to 4,500 feet in snow and blowing snow; clouds and sky condition, 700 feet broken, 1,800 feet overcast; temperature, 30 degrees F; dew point, 29 degrees F; altimeter, 29.50 inHg. At 1511, visibility for runway 08 was reported to be 2,400 to 3,500 feet in snow and blowing snow.

An area forecast issued at 0545 for the northern Seward Peninsula, and the lower Kobuk Valley, valid until 2400, stated, in part: "...AIRMETS are valid until 1200. AIRMET for IFR conditions and mountain obscuration, northern Seward Peninsula, mountains occasionally obscured in clouds and

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**Narrative** (Continued)


light snow, no change. Clouds and weather for northern Seward Peninsula, valid until 1800, 2,000 feet scattered, 1,500 feet broken, tops at 12,000 feet, layers above to 28,000 feet. Occasionally, 2,000 feet overcast; visibility, 3 to 5 statute miles in light snow. Elsewhere, 5,000 feet scattered, 10,000 feet, broken, layers above to 28,000 feet. Outlook, valid from 1800 to 1200 on March 3, 2003; IFR with ceilings due to snow and blowing snow and wind. Turbulence, nothing significant. Icing and freezing level, nothing significant, freezing level at the surface."


An area forecast issued at 1145 for the northern Seward Peninsula, and the lower Kobuk Valley, valid until 0600 on March 3rd, stated, in part: "...AIRMETS are valid until 1800. AIRMET for IFR conditions and mountain obscuration, Kotzebue south, spreading north. Occasional ceilings below 1,000 feet and visibilities below 3 statute miles in light snow, blowing snow and mist, intensifying. Otherwise, Kotzebue south, spreading north, 500 feet scattered, 1,500 feet broken to overcast, 5,000 feet overcast, tops at 7,000 feet. Widely separated layers above, tops at 26,000 feet. Occasionally, visibility, 3 to 5 statute miles in light snow and mist. North of Kotzebue, until the above listed change, few clouds at 2,500 feet, 6,000 feet scattered, 12,000 feet broken, few layers above, tops at 26,000 feet. After 1500, all stations, surface wind increasing to southeast at 29 knots, gusts to 30 knots... AIRMET for turbulence after 1500, occasional moderate turbulence below 6,000 feet, intensifying. Icing and freezing level, Kotzebue south, spreading north, occasional moderate rime icing in clouds from 1,500 to 7,000 feet. Freezing level at the surface, intensifying."


A terminal forecast for the Kotzebue area, issued on March 2, at 0820 and valid from 0900 until 0900 on March 3, stated, in part: "Wind, 060 degrees (true) at 14 knots; visibility, greater than 6 statute miles; clouds and sky condition, 500 feet scattered, 2,500 feet overcast. Temporary changes expected between 0900 and 1300, visibility, 3 statute miles in light snow and mist; 1,000 feet broken. From 1300, wind, 100 degrees (true) at 22 knots; visibility, 4 statute miles in light blowing snow; 400 feet scattered, 2,000 feet overcast. Temporary changes expected between 1300 and 1700, visibility, 3/4 statute mile in light blowing snow; vertical visibility, 500 feet..."

A terminal forecast for the Kotzebue area, issued on March 2, at 1438 and valid from 1500 until 1500 on March 3, stated, in part: "Wind, 080 degrees (true) at 27 knots; visibility, 6 statute miles in blowing snow; clouds and sky condition, few at 1,200 feet, 10,000 feet broken. Temporary changes expected between 1500 and 1700, visibility, 3 statute miles in light blowing snow; 1,200 feet overcast..."

Following the accident, an FAA inspector from the Fairbanks Flight Standards District Office, Fairbanks, Alaska, examined the airplane. He reported the airplane's radar altimeter was set at 200 feet, and the airplane's barometric altimeter was set at 29.69 inHg.

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<b>Landing Facility/Approach Information</b>						
Airport Name RALPH WEIN MEMORIAL AIRPORT		Airport ID: PAOT	Airport Elevation 11 Ft. MSL	Runway Used 08	Runway Length 5900	Runway Width 150
Runway Surface Type: Asphalt						
Runway Surface Condition: Ice Covered						
Type Instrument Approach: NONE						
VFR Approach/Landing: Straight-in						
<b>Aircraft Information</b>						
Aircraft Manufacturer Cessna		Model/Series 208		Serial Number 208B0890		
Airworthiness Certificate(s): Normal						
Landing Gear Type: Tricycle						
Homebuilt Aircraft? No		Number of Seats: 10		Certified Max Gross Wt. 9063 LBS	Number of Engines: 1	
Engine Type: Turbo Prop		Engine Manufacturer: Pratt & Whitney Canada		Model/Series: PT6A-14A	Rated Power: 675 HP	
<b>- Aircraft Inspection Information</b>						
Type of Last Inspection AAIP		Date of Last Inspection 01/31/2003		Time Since Last Inspection 82 Hours	Airframe Total Time 2082 Hours	
<b>- Emergency Locator Transmitter (ELT) Information</b>						
ELT Installed? Yes		ELT Operated? Yes		ELT Aided in Locating Accident Site? No		
<b>Owner/Operator Information</b>						
Registered Aircraft Owner  BERING AIR INC.		Street Address P.O. BOX 1650				
		City NOME		State AK	Zip Code 99762	
Operator of Aircraft  Same as Reg'd Aircraft Owner		Street Address Same as Reg'd Aircraft Owner				
		City		State	Zip Code	
Operator Does Business As:				Operator Designator Code: FXTA		
<b>- Type of U.S. Certificate(s) Held:</b>						
Air Carrier Operating Certificate(s): Commuter Air Carrier; On-demand Air Taxi						
Operating Certificate:			Operator Certificate:			
Regulation Flight Conducted Under: Part 91: General Aviation						
Type of Flight Operation Conducted: Positioning						
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<b>First Pilot Information</b>																																																																																				
Name		City		State	Date of Birth																																																																															
On File		On File		On File	Age																																																																															
					53																																																																															
Sex: M	Seat Occupied: Left	Principal Profession: Civilian Pilot		Certificate Number: On File																																																																																
Certificate(s): Airline Transport; Commercial																																																																																				
Airplane Rating(s): Multi-engine Land; Single-engine Land																																																																																				
Rotorcraft/Glider/LTA: None																																																																																				
Instrument Rating(s): Airplane																																																																																				
Instructor Rating(s): None																																																																																				
Type Rating/Endorsement for Accident/Incident Aircraft? No				Current Biennial Flight Review?																																																																																
Medical Cert.: Class 1		Medical Cert. Status: Valid Medical--w/ waivers/lim.		Date of Last Medical Exam: 12/10/2002																																																																																
<table border="1"> <thead> <tr> <th rowspan="2">- Flight Time Matrix</th> <th rowspan="2">All A/C</th> <th rowspan="2">This Make and Model</th> <th rowspan="2">Airplane Single Engine</th> <th rowspan="2">Airplane Multi-Engine</th> <th rowspan="2">Night</th> <th colspan="2">Instrument</th> <th rowspan="2">Rotorcraft</th> <th rowspan="2">Glider</th> <th rowspan="2">Lighter Than Air</th> </tr> <tr> <th>Actual</th> <th>Simulated</th> </tr> </thead> <tbody> <tr> <td>Total Time</td> <td>25600</td> <td>4200</td> <td>18000</td> <td>5900</td> <td>2900</td> <td>1790</td> <td>210</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Pilot In Command(PIC)</td> <td>24900</td> <td>4200</td> <td>18000</td> <td>5900</td> <td>2900</td> <td>1790</td> <td>210</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Instructor</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 90 Days</td> <td>180</td> <td>100</td> <td>110</td> <td>50</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 30 Days</td> <td>60</td> <td>30</td> <td>30</td> <td>30</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 24 Hours</td> <td>5</td> <td>5</td> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air	Actual	Simulated	Total Time	25600	4200	18000	5900	2900	1790	210				Pilot In Command(PIC)	24900	4200	18000	5900	2900	1790	210				Instructor											Last 90 Days	180	100	110	50							Last 30 Days	60	30	30	30							Last 24 Hours	5	5	5							
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Seatbelt Used? Yes		Shoulder Harness Used? Yes		Toxicology Performed? No																																																																																
				Second Pilot? No																																																																																
<b>Flight Plan/Itinerary</b>																																																																																				
Type of Flight Plan Filed: VFR																																																																																				
Departure Point		State	Airport Identifier	Departure Time	Time Zone																																																																															
SHUNGNAK		AK	SHG	1358	AST																																																																															
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Type of Clearance: Special VFR																																																																																				
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<b>Weather Information</b>																																																																																				
Source of Briefing: Company; Flight Service Station; PATWAS																																																																																				
Method of Briefing: Aircraft Radio																																																																																				

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<b>Weather Information</b>					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
PAOT	1501	AST	11 Ft. MSL	1 NM	80 Deg. Mag.
Sky/Lowest Cloud Condition:			Ft. AGL	Condition of Light: Day	
Lowest Ceiling: Broken			1100 Ft. AGL	Visibility: 0.75 SM	Altimeter: 29.50 "Hg
Temperature: -1 °C	Dew Point: -2 °C	Wind Direction: 62		Density Altitude: Ft.	
Wind Speed: 26	Gusts:	Weather Conditions at Accident Site: Instrument Conditions			
Visibility (RVR): Ft.	Visibility (RVV) SM	Intensity of Precipitation: Light			
Restrictions to Visibility: Blowing Snow					
Type of Precipitation: Snow					

<b>Accident Information</b>					
Aircraft Damage:		Aircraft Fire:		Aircraft Explosion	
Classification:					
- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot			1		1
Second Pilot					
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants					
Other Crew					
Passengers					
- TOTAL ABOARD -			1		1
Other Ground					
- GRAND TOTAL -			1		1

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<b>Administrative Information</b>		
Investigator-In-Charge (IIC) SCOTT ERICKSON		
Additional Persons Participating in This Accident/Incident Investigation:  MICHAEL ALKANA AVIATION SAFETY INSPECTOR FAA-AL-FAI FSDO 01 6450 AIRPORT WAY, SUITE #2 FAIRBANKS, AK 99709		
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